

WHAT IS CLAIMED IS:

1. For use in an ad hoc temporary incident area network in which a module is coupled to a transceiver to convert audio information available from the transceiver to the format and frequency of the temporary incident area network without using direct sensor data transmission, apparatus for providing situational awareness to individuals coupled at nodes on the network, comprising:

a sensor coupled to one of said modules for coupling sensor data to said module;

a circuit at said module for uploading sensor data to said network; and,

means at a node for downloading the sensor data carried by said network and for displaying said sensor data at said node, thus to reliably provide sensor data by using said network.

2. The apparatus of Claim 1, and further including a camera at said module for providing image signals as an output thereof, said uploading circuit uploading said image signals.

3. The apparatus of Claim 2, wherein said image signals include video signals.

4. The apparatus of Claim 2, wherein said image signals include still picture signals.

5. The apparatus of Claim 1, wherein said sensor is taken from the group consisting of location sensors, oxygen tank sensors, gas sensors, HAZMAT sensors, photo-ionization sensors and biometric sensors.

6. The apparatus of Claim 1, and further including an incident commander terminal having a display coupled to said node and wherein the sensor data transmitted over said network is displayed for said incident commander at the associated incident commander display terminal, thereby to provide said incident commander with situational awareness based on said sensor data.

7. The apparatus of Claim 6, wherein said sensor data includes information relating to the location of said module and wherein said display includes a map and an icon indicating the location of said module.

8. In an ad hoc temporary incident area network that includes modules at nodes thereof for converting verbal communications from a standard transceiver to the frequency and format associated with the temporary incident area network, man-portable apparatus for providing situational awareness to an individual at a node on said network, comprising:

a handheld transceiver having audio in, audio out and push-to-talk outputs available external thereto; and,

a mini module carried by said transceiver coupled to said outputs for at least converting verbal communications associated with said transceiver to a frequency and format compatible with said network, said mini module including circuits for transmitting said verbal communications between modules over said network.

9. The apparatus of Claim 8, wherein said transceiver includes a battery and an external power connection contact and wherein said mini module includes a power

input connection contact coupled to said external power connection contact for the powering of said mini module from the battery of said transceiver.

10. The apparatus of Claim 8, and further including a sensor coupled to said mini module, said mini module including a circuit for uploading data from said sensor to said network.

11. The apparatus of Claim 10, and further including a predetermined number uniquely identifying said mini module, and wherein said uploading circuit uploads said unique identifying number.

12. The apparatus of Claim 11, and further including a camera coupled to said mini module and wherein said uploading circuit includes a circuit for uploading the output from said camera to said network.

13. The apparatus of Claim 12 wherein said camera is taken from a group consisting of video cameras and still cameras.

14. The apparatus of Claim 8, and further including wearable sensors coupled to said mini module adapted to be worn by the individual using said transceiver, said sensors coupling data collected by a sensor that relates to events in the immediate vicinity of said individual to said mini module, whereby sensor data uploaded to said network and available at a node thereof is downloadable to said node for providing situational awareness of conditions in the incident scene at said individual, thus to provide situational awareness based on sensed conditions at said individual.

15. The apparatus of Claim 14, wherein said sensor includes a camera, whereby images in the vicinity of said individual are transmitted over said network to said node to support situational awareness.

16. The apparatus of Claim 14, and further including a local wireless network for coupling said sensor to said mini module, whereby said sensor can be worn by said individual and wirelessly connected to said mini module.

17. The apparatus of Claim 16, wherein said wireless network includes a Blue Tooth network.

18. The apparatus of Claim 17, and further including a wireless headset communicating with said mini module, whereby verbal communications can be established between said mini module and said network regardless of said transceiver.

19. A method for providing situational awareness for an incident commander on a node of an ad hoc temporary incident area network from observations made by an individual at the incident scene, comprising the steps of:

providing the individual with a transceiver, a mini module and at least one sensor coupled to said mini module;

uploading data from the sensor onto the ad hoc network; and,

identifying the mini module uploading sensor data, whereby the incident commander is provided with sensor data acquired from an identified individual in the vicinity of the mini module.

20. The method of Claim 19, and further including the steps of identifying the location of the mini module at the incident scene, uploading the location of the mini module to the network, downloading the location of the mini module at the node to the incident commander, and displaying both sensor data and location data to the incident commander.